

HVI® and HVI®power Conductor for Ex zones 1 and 21



HVI® and HVI®power Conductor: The safe solution for protecting systems in hazardous areas from lightning strikes.

In many industrial sectors potentially explosive atmospheres can form during process-related activities. These explosive atmospheres are classified into Ex zones based on the duration and frequency of their persistence. Ex zones are recorded in explosion protection documents. When designing and installing lightning protection systems Ex zones must be carefully considered to prevent lightning from being a source of ignition. Ignition sparks resulting from lightning currents must be generally prevented in Ex zones 1 and 21. This can be achieved by electrically isolating the lightning protection system from conductive parts of the building construction and installation.

The high-voltage-resistant and insulated conductors from DEHN, HVI® and HVI®power Conductor, are a safe, tested and certified solution for discharging lightning currents.

HVI® and HVI®power Conductor are suitable for installation in Ex zones 1 and 21.* The special type of installation ensures that no uncontrolled sparking occurs when lightning current flows through them. For installation, special conductor holders are needed.



Installation of HVI®Conductors in a hazardous area.



The German TÜV - Technischer Überwachungsverein - confirms that HVI® and HVI®power Conductors are suitable for installation in Ex zones 1 and 21.

Technical feature	HVI®Conductor Part No. 819 135	HVI®power Conductor Part No. 819 137
Tested with I_{imp} (10/350 μ s)	150 kA	200 kA
Use in class of LPS (if $k_c = 1$)	II, III, IV	I, II, III, IV
Separation distance (air)	≤ 75 cm	≤ 90 cm

* In Ex zones 2 + 22, HVI®Conductor, HVI®power Conductor, HVI®light Conductor can be installed without observing any special installation instructions.

HVI® and HVI®power Conductor for Ex zones 1 and 21



Conductor holder and other accessories for installing HVI® and HVI®power Conductors in Ex zones 1 and 21.

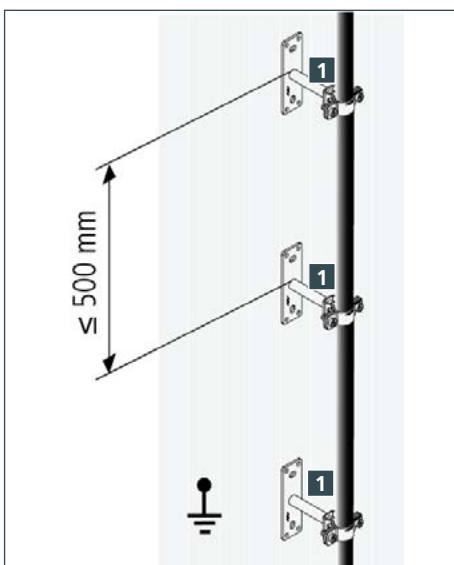
Conductor holder for HVI®Conductors	Wall distance (mm)	Support Rd (mm) of conductor holder	Part No.
1 HVI®Ex W70 holder	70	20	275 440
2 HVI®Ex W200 holder	200	20	275 441
3 HVI®Ex P70 holder	70	20	275 444
4 HVI®Ex P200 holder	200	20	275 442

Conductor holder for HVI®power	Wall distance (mm)	Support Rd (mm) of conductor holder	Part No.
1 HVI® P Ex W85 holder	85	27	275 450
2 HVI® P Ex W240 holder	240	27	275 451
3 HVI® P Ex P85 holder	85	27	275 454
4 HVI® P Ex P240 holder	240	27	275 455

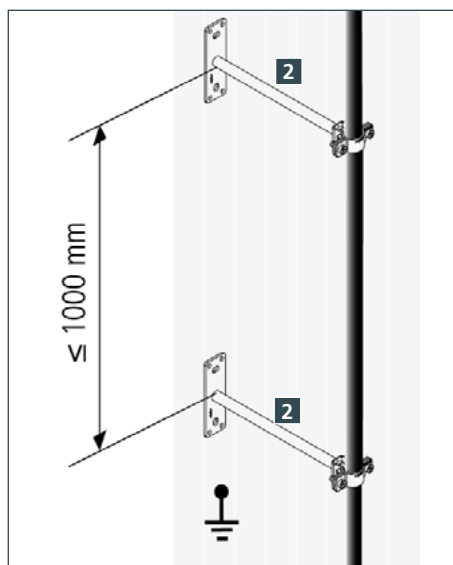
Accessories	Part No.
5 HVI®Ex busbar 500	275 498
6 Pipe clamp	106 323
7 Separate grip head	106 324
8 Tensioning strap	540 901



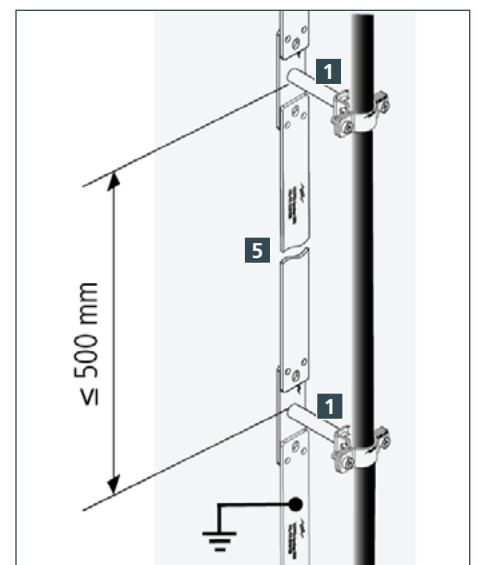
Installation examples



Installation in parallel to an earthed metal façade with a holder distance ≤ 500 mm



Installation in parallel to an earthed metal façade with a holder distance ≤ 1000 mm



Installation in parallel to a non-conductive structure with a holder distance ≤ 500 mm

DEHN, DEHN logo and HVI are protected by German Trademark and/or are registered trademarks in other countries. We accept no liability for technical modifications, misprints and errors. Illustrations are not binding.